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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/459,287	12/17/1999	KOICHI KAMIJO	JA9-98-173	9962

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[REDACTED] EXAMINER

SIMITOSKI, MICHAEL J

ART UNIT	PAPER NUMBER
2134	7

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/459,287	KAMIJO ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Michael J Simitoski	2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 December 1999.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 December 1999 is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### *Specification*

1. The disclosure is objected to because of the following informalities:

On page 7, line 1: The word “through” is misspelled as “trough”.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3, 5-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claims 1-3 and 5 fail to include definitive steps that must be performed; they seem to be reciting capabilities rather than actions performed.

b. Claim 3 recites “implementing ... authentication”, but claim 1 has previously disclosed “A method for authenticating digital data”.

c. Claims 6, 7 and 9 are apparatus limitations that do not affect the active method steps and have been given little patentable weight.

4. Claim 4 is rejected under 35 U.S.C. 112, fourth paragraph, as failing to set forth and specify a further limitation of the subject matter claimed. Claim 4 appears to remove steps of claim 1 rather than adding an additional limitation.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 5-8, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,510,520 to Steinberg in view of U.S. Patent 5,499,294 to Friedman.

In regards to claim 1, Steinberg discloses data transfer between a digital camera and a storage device and between a storage device and a computer (see figure 2). Steinberg's storage device performs encryption operations, such as creating an authentication file and digital fingerprints, on the data before the data is transferred to the computer (see column 1, lines 40-43, column 2, lines 16-39 and column 3, lines 45-51). Steinberg's disclosure lacks authentication between the input device and the storage device. Friedman discloses a digital camera equipped with a processor capable of encrypting data before transferring the data to a storage device (see column 4, lines 29-46 and column 7, lines 46-57), making digital data "resistant to forgery attempts" (see column 7, lines 5-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Steinberg to include, in addition to authentication between an input device and computer, a means for

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authentication between an input device and a storage memory, as taught by Friedman, to make the data resistant to forgery.

In regards to claim 2, Steinberg discloses a storage device as modified above that can append data, such as secure annotations and separate data included in an image header, to image data (see column 2, lines 16-39).

In regards to claim 3, Steinberg discloses a storage device as modified above that includes a processor for image processing activity such as encryption (see column 5, lines 60-67 and figure 3).

In regards to claims 5 and 8, Steinberg discloses a storage device as modified above that can encrypt and store data from an input device. Steinberg's invention lacks the application of a public key cryptographic scheme and lacks the use of a hash function between the input device and the memory. Friedman teaches that public key encryption techniques offer the advantage of decrypting data with a different key than was used to encrypt data (see column 2, lines 18-26), which allows any holder of the public key to verify the validity of signed data. Friedman further discloses that it is known in the art for a sender to generate an electronic signature by hashing a message, to create a file unique to the message, but smaller in size, and then encrypting the message using a private key (see figures 2, 3B, 3C and column 2, lines 63-66). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Steinberg to employ the public-key encryption technique, as taught by Friedman, allowing a vast array of users to authenticate a digital image. It would have been further obvious to employ hashing so as to create a unique, but smaller representation of the original data as an electronic signature.

In regards to claim 6 and 7, Steinberg discloses a storage device as modified above that can include an EEPROM or ROM to store data as needed (see column 5, lines 55-59 and column 6, lines 56-65).

7. Claim 4, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Steinberg in view of Friedman, in further view of U.S. Patent 5,465,300 to Altschuler et al. (Altschuler). Steinberg discloses data transfer between a digital camera and a storage device and between a storage device and a computer, where the storage device and computer engage in authentication. Friedman discloses authentication between a digital camera and a storage device. The Steinberg invention, as modified above, lacks determining whether to use secure or plaintext communication. Altschuler discloses a method whereby a plaintext communication is initiated between two devices. Upon connection, the devices determine if a secure communication can be open and initiate a secure mode (see figure 5), to alleviate the need for human decision on whether or not to go secure (see column 1, lines 39-53). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the Steinberg invention to include a means for automatically determining whether or not to use secure communication methods, as taught by Altschuler, to eliminate the need for human decision.

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***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (703) 305-8191. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:30 p.m.. The examiner can also be reached on alternate Fridays from 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703)308-4789.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, DC 20231

**Or faxed to:**

(703) 746-7239 (for formal communications intended for entry)

**Or:**

(703) 746-7240 (for informal or draft communications, please label  
“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA 22202, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

  
MJS

August 6, 2003

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100